

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently Amended) Polymer electrolyte for an electrochemical generator, wherein said polymer electrolyte exhibits a stability voltage higher than 4 volts and comprises comprising:

(a) at least one four-branched polymer having a hybrid termination, wherein at least one branch of said four branched polymer is capable of giving rise to cross-linking; and with

(b) at least one component selected from the following families:

~~(b1) poly(vinylidene fluorides), also called (PVDF), of chemical formula  $(CH_2-CF_2)_n$ , where n varies between 150 and 4,000;~~

~~(b2) poly(vinylidene fluoro-co-hexafluoropropene) copolymers, of formula  $[(CH_2-CF_2)_x(CF_2-CF(CF_3))_{1-x}]_n$  also called (PVDF-HFP), wherein n varies between 150 and 4,000;~~

~~(b3) poly(tetrafluoroethylenes), also called (PTFE), of chemical formula  $(CF_2-CF_2)_n$ , wherein n varies from 5 to 20,000;~~

~~(b4) poly(ethylene-co-propylene-co-5-methylene-2-norbornenes) or ethylene propylene-diene copolymers, also called EPDM;~~

~~(b5) polyvinyl alcohol having an average molecular weight between 50,000 and 1 million, or a cellulose, having an average molecular weight between 5,000 and 250,000 in which part of the OH groups are replaced by  $OCH_3$ ,  $OC_2H_5$ ,  $OC_2H_4OH$ ,  $OCH_2CH(CH_3)OH$ ,  $OC(=O)CH_3$ , or  $OC(=O)C_2H_5$ ;~~

~~(b6) ethylene oxide condensation products having an average molecular weight between 1,000 and 5,000 or ethylene oxide condensation products in admixture with propylene oxide or glycerol or trimethylolpropane, or ethylene oxide condensation products cross-linked with a di or tri-isocyanate of formula  $(O=C=N)_x-R$  in which  $2 < x < 4$  and R represents an aryl or alkyl group ensuring polyfunctionality with the group  $(O=C=N)_x$ ;~~

~~(b7) poly(methylmethacrylates) also called (PMMA), of formula  $[(CH_2-C(CH_3)(CO_2CH_3))_n]$ , wherein n varies between 100 and 10,000;~~

~~(b8) poly(acrylonitriles), also called (PAN), of chemical formula  $[(CH_2-CH(CN))_n]$ , in which n varies from 150 to 18,800;~~

~~(b9 b1) a mixture of  $SiO_2$  and or  $Al_2O_3$ ; and~~

~~(b10 b2) nano  $TiO_2$  noncoated or coated with an organic material that is compatible with a tetrafunction terminal acryloyl-modified alkylene oxide polymer, the organic material being selected from at least one polyol or at least one polyethylene-polyoxyethylene copolymer or with an inorganic material selected from  $SiO_2$  and  $Al_2O_3$ .~~

2. (Previously Presented) Polymer electrolyte according to claim 1, further comprising a salt or a mixture of salts with a plasticizing agent.

3. (Original) Polymer electrolyte according to claim 2, in dry form (free solvent), obtained by adding a lithium salt or a mixture of salts (in the matrix) of the polymer in order to provide ionic conductivity.

4. (Currently Amended) Polymer electrolyte according to claim 3, in which the lithium salts are of the type:  $LiN(SO_2CF_3)_2$ ;  $LiTFSi$ ;  $LiN(SO_2C_2F_5)_2$ ;  $BETI$ ;  $LiC(SO_2CF_3)_3$ ;  $LiBF_4$ ;  $LiPF_6$ ;  ~~$LiCLO_4$~~   $LiClO_4$ ;  $LiSO_3CF_3$ ; or  $LiAsF_6$ .

5. (Previously Presented) Polymer electrolyte according to claim 2, in which the plasticizing agent consists of at least one organic solvent selected from the group consisting of: an ethylene carbonate, a propylene carbonate, a  $\gamma$ -gamma butyrolactone, a dimethyl carbonate, a diethyl carbonate, a tetra ethyl-sulfone amide, and a methyl-ethyl carbonate (EMC).

6-60. (Canceled)